

Applicant: Anatoliy V. Tsyrganovich  
Serial No.: 10/820,237  
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Docket No.: ZIL-519-1C

**Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application.

**Listing of Claims**

1-32. (Canceled)

33. (currently amended) The horizontal deflection generator of Claim 3234, wherein the horizontal correction signal is a continuous signal.

34. (currently amended) A horizontal deflection generator, comprising:  
a circuit that generates a horizontal sawtooth signal having an amplitude;  
and

means for modulating the amplitude of the horizontal sawtooth signal  
using a horizontal correction signal to generate a horizontal deflection current  
signal, wherein the horizontal correction signal has a vertical active time  $t_{VA}$  and a  
vertical retrace time  $t_{VR}$ , wherein the horizontal deflection current signal is not  
distorted after a transition from the vertical active time  $t_{VA}$  to the vertical retrace  
time  $t_{VR}$ . The horizontal deflection generator of Claim 32, wherein the means  
comprises an amplifier, wherein the means generates a modulated horizontal  
sawtooth signal, and wherein the amplifier generates the horizontal deflection  
current signal by amplifying the modulated horizontal sawtooth signal.

35. (previously presented) The horizontal deflection generator of Claim 34,  
wherein the amplifier has a limited frequency bandwidth.

36. (currently amended) The horizontal deflection generator of Claim 3234,

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wherein the horizontal deflection generator is part of a raster display system.

37. (currently amended) The horizontal deflection generator of Claim 3234, wherein the horizontal deflection generator is implemented on a single integrated circuit device.

38. (currently amended) A horizontal deflection generator, comprising:

a circuit that generates a horizontal sawtooth signal having an amplitude;  
and

means for modulating the amplitude of the horizontal sawtooth signal  
using a horizontal correction signal to generate a horizontal deflection current  
signal, wherein the horizontal correction signal has a vertical active time  $t_{VA}$  and a  
vertical retrace time  $t_{VR}$ , wherein the horizontal deflection current signal is not  
distorted after a transition from the vertical active time  $t_{VA}$  to the vertical retrace  
time  $t_{VR}$ , and~~The horizontal deflection generator of Claim 32,~~ wherein the  
horizontal deflection generator is implemented in software.

39. (Canceled)

40. (currently amended) A method, comprising:

generating a sawtooth signal, wherein the sawtooth signal has an  
amplitude;

generating a correction signal, wherein the correction signal has a vertical  
retrace time  $t_{VR}$  and a vertical active time  $t_{VA}$ , wherein a circuit generates the  
correction signal, and wherein the circuit includes a level shifter and an inverter;

modulating the amplitude of the sawtooth signal using the correction  
signal to generate a deflection signal; and

amplifying the deflection signal to generate a deflection current signal,  
wherein the deflection current signal is not distorted when the correction signal  
transitions from the vertical retrace time  $t_{VR}$  to the vertical active time  $t_{VA}$ .~~The~~

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~~method of Claim 39, wherein the circuit includes an inverter.~~

41. (currently amended) A method, comprising:

generating a sawtooth signal, wherein the sawtooth signal has an amplitude;

generating a correction signal, wherein the correction signal has a vertical retrace time  $t_{VR}$  and a vertical active time  $t_{VA}$ , wherein a circuit generates the correction signal, and wherein the circuit includes a level shifter and a gain controller;

modulating the amplitude of the sawtooth signal using the correction signal to generate a deflection signal; and

amplifying the deflection signal to generate a deflection current signal, wherein the deflection current signal is not distorted when the correction signal transitions from the vertical retrace time  $t_{VR}$  to the vertical active time  $t_{VA}$ . ~~The method of Claim 39, wherein the circuit includes a gain controller.~~

42. (Canceled)

43. (currently amended) A horizontal deflection generator, comprising:

a circuit that generates a horizontal sawtooth signal having an amplitude; and

means for modulating the amplitude of the horizontal sawtooth signal using a horizontal correction signal to generate a horizontal deflection current signal, wherein the horizontal correction signal does not have any discontinuities, ~~and~~ ~~The horizontal deflection generator of Claim 42, wherein the horizontal deflection generator is implemented in software.~~

44. (currently amended) A horizontal deflection generator, comprising:

a circuit that generates a horizontal sawtooth signal having an amplitude; and

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means for modulating the amplitude of the horizontal sawtooth signal using a horizontal correction signal to generate a horizontal deflection current signal, wherein the horizontal correction signal does not have any discontinuities The horizontal deflection generator of Claim 42, wherein the means comprises an amplifier, wherein the means generates a modulated horizontal sawtooth signal, and wherein the amplifier generates the horizontal deflection current signal by amplifying the modulated horizontal sawtooth signal.

45. (new) The method of claim 40, wherein the sawtooth signal is a horizontal sawtooth signal, and wherein the correction signal is a horizontal correction signal.

46. (new) The method of claim 40, wherein the generating the correction signal comprises generating a higher-order signal.

47. (new) The method of claim 40, wherein the generating the correction signal is performed by combining a first correction signal component with a second correction signal component such that the correction signal has no discontinuities.

48. (new) The method of claim 47, wherein the first correction signal component has a constant amplitude during the vertical active time  $t_{VA}$ .

49. (new) The method of claim 47, wherein the second correction signal component has a constant amplitude during the vertical retrace time  $t_{VR}$ .

50. (new) The method of claim 47, wherein the first correction signal component has an amplitude, and wherein the amplitude of the first correction signal component varies parabolically over a portion of the first correction signal component.

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51. (new) The method of claim 41, wherein the generating the correction signal is performed by combining a first correction signal component with a second correction signal component such that the correction signal has no discontinuities.

52. (new) The horizontal deflection generator of claim 38, wherein the horizontal deflection generator is part of a computer display.

53. (new) The horizontal deflection generator of claim 38, wherein the horizontal correction signal has no discontinuities.

54. (new) The horizontal deflection generator of claim 38, wherein the horizontal deflection generator is implemented on a single integrated circuit device.